

In the Claims

Claims are amended as follows:

1. (previously presented) A method of transporting a supercarrier signal over a network span, the method comprising the steps of:

transmitting said supercarrier signal, including messaging information, using a first protocol;

transparently demultiplexing said supercarrier signal into a plurality of trib signals;

transmitting said trib signals over said network span using a second protocol;

whereby the messaging information required to maintain said first protocol is included in said trib signals; and

after the transmission over the network span, transparently remultiplexing the trib signals into the supercarrier signal including the messaging information.

2. (original) A method as claimed in claim 1, wherein the messaging information is used to transparently multiplex the trib signals into the supercarrier signal.

3. (previously presented) A method as claimed in claim 1, wherein each trib signal is multiplexed from a plurality of basic signals.

4. (original) A method as claimed in claim 1, wherein the messaging information includes both essential messaging information and desirable messaging information.

5. (previously presented) Apparatus for transporting a supercarrier signal including messaging information, received using a first protocol; over

a network span comprising a plurality of low bit rate network sections for transporting a plurality of trib signals using a second protocol; the apparatus having:

a transparent demultiplexer coupled to receive said supercarrier signal and demultiplex said supercarrier signal into said trib signals for transmission over said network span;

wherein said demultiplexer includes means for inserting into said plurality of trib signals the messaging information required to maintain said first protocol, and

a multiplexer connected between said network span and said network, for transparently remultiplexing the trib signals into the supercarrier signals including the messaging information.

6. (cancelled)

7. (previously presented) Apparatus as claimed in claim 5, wherein the information required to maintain the first protocol is extracted from the trib signals.

8. (original) Apparatus as claimed in claim 5, wherein the trib signals may pass in both directions along the network span.

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (cancelled)

19. (cancelled)

20. (currently amended) A component for a transparent demultiplexer comprising software arranged to control the demultiplexer to:

receive a supercarrier signal transported using a first protocol;

transmit a plurality of trib signals using a second protocol;

demultiplex said supercarrier signal into said trib signals; and

extract from the supercarrier signal messaging information, required ~~sufficient~~ to recreate the supercarrier signal according to said first protocol, from the trib signals after transmission, and insert said messaging information into the trib signals.

21. (previously presented) A component for a transparent multiplexer comprising software arranged to control the multiplexer to:

transmit a supercarrier signal using a first protocol;

receive a plurality of trib signals transported using a second protocol;

multiplex said trib signals into said supercarrier signal; and

extract messaging information from the trib signals and use said messaging information to recreate the supercarrier signal from the trib signals after transmission, according to said first protocol.